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### STATE OF HAWAII COMMENTS

## APPENDIX B

(CC Docket No. 92-256)

JOHN WAIHEE GOVERNOR



ROBERT A ALM DIRECTOR COMMISSIONER OF SECURITIES

SUSAN DOYLE

#### STATE OF HAWAII

# OFFICE OF THE DIRECTOR DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS

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September 26, 1991

Ms. Donna Searcy Secretary Federal Communications Commission 1919 M Street, N.W. Room 222 Washington, D.C. 20554

RE: CC Docket No. 90-623 (Computer III Remand)

Dear Ms. Searcy:

The Hawaii Department of Commerce and Consumer Affairs reviewed and analyzed the pleadings in the above-referenced Docket. The enclosed report, entitled "Comparison of GTE, GTE Hawaiian, RBHC's and BOC's," sets forth pertinent facts relevant to certain assertions made in the pleadings.

The Report cites facts which suggest that there are no apparent reasons to distinguish GTE's operating companies (such as Hawaiian Telephone Company) from Bell operating companies, with regard to the provision of open network architecture and other consumer and competitive safeguards.

Very truly yours,

Robert A. Alm

Director

Enclosure

# REPORT TO THE DIRECTOR OF THE DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS STATE OF HAWAII

# COMPARISON OF GTE, GTE HAWAIIAN, RBHC'S AND BOC'S

Prepared By

Patricia J. Lum, Ph.D. Chief Researcher

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TABLE NUMBER IN REPORT	SOURCE(S)
TABLE 1	Federal Communications Commission. Table 2.1 Statistics of Communications Common Carriers. 1989.90 Edition.
TABLE 2	Federal Communications Commission. Table 2.10.  Statistics of Communications Common Carriers.  1989/90 Edition.
TABLE 3	Federal Communications Commission. Table 2.09.  Statistics of Communications Common Carriers.  1989/90 Edition.
TABLE 4	U.S. Bureau of the Census, Population Division MA-1. Population of Metropolitan Areas: 1990 and 1980, By 1990 Poulation Rank.
TABLE 5	Federal Communications Commission. Table 2.10. Statistics of Communications Common Carriers. 1989/90 Edition.
TABLE 6	Docket 90-623. GTE Reply Comments. Exhibit I.
TABLE 7	Federal Communications Commission. Table 2.10. Statistics of Communications Common Carriers. 1989/90 Edition.
TABLE 8	Docket 90-623. GTE Reply Comments. Exhibit I. GTE Operating Agreement, April 10, 1991.
TABLE 9	U.S. Bureau of the Census, Population Division MA-1. Population of Metropolitan Areas: 1990 and 1980, By 1990 Poulation Rank.
TABLE 10	Docket 90-623. GTE Reply Comments. Exhibit III. GTE Operating Agreement, April 10, 1991. U.S. Bureau of the Census, Population Division MA-1. Population of Metropolitan Areas: 1990 and 1980, By 1990 Poulation Rank.
TABLE 11	Federal Communications Commission. Table 2.09. Statistics of Communications Common Carriers. 1989/90 Edition.
TABLE 12	Federal Communications Commission. Table 2.09.  Statistics of Communications Common Carriers.  1989/90 Edition.  Federal Communications Commission. Table 2.10.  Statistics of Communications Common Carriers.  1989/90 Edition.

## LIST OF SOURCES REFERENCED TO TABLES

TABLE NUMBER IN REPORT	SOURCE(S)
TABLE 13	Federal Communications Commission. Table 2.10.  Statistics of Communications Common Carriers.  1989/90 Edition.
TABLE 14	"CEI Scoreboard". Enhanced Services Outlook. Monthly issues between January 1989 and March 1990.
TABLE 15	Federal Communications Commission. Table 2.9. <u>Statistics of Communications Common Carriers</u> .  1989/90 Edition.
APPENDIX A	GTE Operating Agreement. April 10, 1991. Personal Conversation with Joel Matsunaga, Director of Regulatory Affairs for GTE Hawaiian Telephone.
APPENDIX B	Federal Communications Commission. Table 2.9.  Statistics of Communications Common Carriers.  1989/90 Edition.

#### I. INTRODUCTION

There are really three areas of concern in determining whether GTE should be subject to the same level of regulatory scrutiny as the RBHC's: whether the size of the company is small enough that it represents a burdensome capital requirement; whether its relative line density results in low profitability; or, arguably, whether GTE has shown such exemplary good corporate citizenship, as opposed to the RBHC's, that this level of regulation is unwarranted.

Line density really has nothing to do with whether or not anti-discrimination rules should be applied. Such safeguards are meant to protect against monopoly abuse of power. The number of lines per square mile of service territory does not diminish the potential for abuse. It merely diminishes the number of people that will suffer the consequences of such abuse. The real argument is that the cost will be so high that it financially weakens the company. This requires a cost/benefit assessment. The company provided no estimate of added revenues from access to new services so it is impossible to assess the cost/benefit ratio. It is possible to compare actual costs, revenues, and income: a) between GTE Hawaiian Tel and the BOC's; and b) between GTE and the RBHC's. This is the tact we take in this analysis.

#### II. THE CASE OF GTE HAWAIIAN TEL

#### A. Single Telephone Company Standards

First let us note that Hawaii is the only state in the nation solely served by an independent telephone company. All others solely served are served by Bell companies. This is portrayed in Table 1 below. This factor is even more important for Hawaii than it would be on the Mainland because there is no

#### TABLE 1

#### STATES SERVED BY A SINGLE TELEPHONE COMPANY

States Covered By Safeguards

States Not Covered By Safeguards

Delaware
District of Columbia
Maryland
Massachusetts
Rhode Island

Hawaii

Bell company adjacent. Users disenchanted with GTE Hawaiian

cannot readily relocate into a BOC's territory.

#### B. Company Size

The company size is important to the determination of the required expenditure up front to provide implementation. Table 2

TABLE 2

#### A COMPARISON OF COMPANY SIZE BETWEEN GTE HAWAIIAN AND BOC'S

Company Ranked By Lines Served	Number of Lines
1. Pacific Bell	13,986,907
2. Southwestern Bell	11,444,061
3. Southern Bell	9,926,612
4. New York Telephone	9,602,789
5. South Central	7,078,607
6. Mountain States	5,855,614
7. New England Telephone	5,612,704
8. Illinois Bell	5,229,295
9. Pennsylvania Bell	5,228,323
10. New Jersey Bell	4,873,362
ll. Michigan Bell	4,141,840
12. Northwestern Bell	3,596,827
13. Ohio Bell	3,219,855
14. Pacific Northwest Bell	2,854,095
15. Chesapeake & Potomac MD	2,803,624
16. Chesapeake & Potomac VA	2,577,597
17. Indiana Bell	1,787,021
18. Wisconsin Bell	1,672,323
19 Cesapeake & Potomac (DC)	842,815
20. Chesapeake & Potomac WV	685,082
21. GTE Hawaiian Tel	$\frac{564,262}{136,032}$
22. Diamond State Telephone	416,970
23. Nevada Bell	221,267

shows the relative ranking of GTE Hawaiian by the number of lines served relative to the Bell operating companies. While GTE

Hawaiian is low on the list, it is still larger, in terms of the number of lines served, than two of the Bell companies where safeguards are already present. A comparison with Diamond State Telephone Co. (a BOC), which also covers a whole state, is interesting. While Diamond State Telephone Co., who serves the whole of Delaware, ranks 10 to GTE Hawaiian 17 on density among operating companies, it lags GTE Hawaiian in terms of the number of lines served, the operating revenue of the company and the net income. Most importantly, Diamond State garners a lower net income per line than GTE Hawaiian.

Expenses are important to the consideration of the company's financial health, clearly the most important factor in any investment or expense consideration. To make comparison simple, we have shown the ranking of GTE Hawaiian, relative to Bell operating companies on investment (the only real issue with respect to density), operating revenue, and net income on a per line basis in order to control for company size. When viewed in this fashion, GTE Hawaiian holds up extremely well. Table 3 sets out these rankings by operating company. The only time that density would be of concern is when revenues are not adequate to ensure an adequate return. In general, operating revenues are well aligned with investment, which one would expect, since investment is part of the basis for determining revenue requirements. GTE Hawaiian net income per line also remains sound. Even at the level of GTE Hawaiian's expenses, using 1989 as the base, the alleged first year "expenses" for ONA would be less than an additional 2% in operating expenses, i.e., operating expenses would have increased to \$385 million from \$378 million. In our opinion, this is an overestimate because

this assumes that the change would be revenue neutral while it is likely that the implementation of ONA would increase revenues by encouraging increased usage.

TABLE 3

RANKING ON INVESTMENT, REVENUE AND INCOME : A COMPARISON OF GTE HAWAIIAN AND THE BELL OPERATING COMPANIES

Company	Rank By Investment <u>Per Line</u>	Rank By Operating Revenues Per Line	Rank By Net Income <u>Per Line</u>
GTE-Hawaiian	$\frac{1}{2}$	$\frac{1}{4}$	<u>8</u> 9 7
C&P of WV	2		9
SW Bell	3	10	3
S. Central	4 5	6	3
Southern B.		7 3 8	1
Nevada Bell	6 7	3	2
NW Bell	/		17
MT. Bell	8	11	15
NY Tel.	9	2	22
PNW Bell	10	2 5 9	4
NET	11		18
C&P VA	12	15	10
Michigan	13	13	14
Pacific Tel	14	20	5
C&P MD	15	18	20
NJ Bell	16	14	13
C&P (DC)	17	16	23
PA Bell	18	21	21
Onio Bell	19	12	11
IN Bell	20	19	6
WI Bell	21	17	16
Diamond St.	22	23	12
IL Bell	23	22	19

The bottom line for GTE Hawaiian is really their net income. GTE Hawaiian cannot argue that their net income per line and pro-efficiency exempts them from legitimate application of anti-discrimination rules. Nor have they shown that demand for information services is low. In fact, if GTE Hawaiian implemented the ONA rules at the alleged \$11.70 per line their net income per line would fall from \$85.63 in 1989 to \$73.93 net income per line, but only for the first year. This level of net income, however, is still higher than the 1989 net income per line of 9 of the 22 BOC's. Beyond the first year, the level would increase to \$80.31 per line, higher than Diamond State and higher than 13 other BOC's.

#### C. Line Density

If one follows the logic of density and assumes that, based on GTE's Reply Comments, it would be uneconomic to provide anti-discrimination safeguards, in particular ONA, in metropolitan areas Honolulu's size or smaller, then the major metropolitan areas in 15 states, in addition to Honolulu, would never have such safeguards, let alone the rest of the citizens of those states. Table 4 sets out the list of states whose largest metropolitan area is smaller than Honolulu.

MARIE /

TABLE 4

STATES WHOSE LARGEST METROPOLITAN AREA IS SMALLER THAN HONOLULU

		1990 RANK BY	CEI
STATE	MSA	POPULATION	PLANS
Vermont	Burlington	212	у
West Virginia	Charleston	134	
Iowa	Des Moines	94	у
Mississippi	Biloxi-Gulfport	156	
Maine	Portland	150	
Arkansas	Little Rock	7 2	
Nebraska	Omaha	63	y
Nevada	Las Vegas	53	
Idaho	Boise	154	y
New Mexico	Albuquerque	77	-
North Dakota	Bismarck	273	
South Dakota	Sioux Falls	224	
Montana	Billings	246	
Wyoming	Cheyenne	281	
Alaska	Anchorage	143	

However, with the exception of Alaska and Hawaii, all of the citizens of these states will, in time, have access to ONA and already are protected by safeguards in place at the federal level. In fact, four of these areas were chosen by the Bell company servicing them as sites of the first trials of CEI services. U.S. West already has plans to deploy ONA in New Mexico whose statewide density of telephone lines per square mile is only 9.6 in Bell territories.

Finally, density should be a non-issue in Hawaii even if low density had a significant effect on economic viability, because Hawaii's line density is not low. At the operating company level, seven of the twenty-two Bell operating companies have line densities lower than GTE Hawaiian. Five of the seven RBHC's have operating companies whose line densities are lower than GTE Hawaiian. Ranked by state, Hawaii has the 13th highest telephone line density per square mile in the nation. This information is set out in Table 5 below.

COMPARISON OF LINE DENSITY BETWEEN GTE HAWAIIAN AND THE BOC'S

Operating Company	Lines/Sq. Mile
Chesapeake & Potomac (DC)	13,000.0
New Jersey Bell	730.1
Illinois Bell	435.4
New York Telephone	340.2
Pennsylvania Bell	286.8
Ohio Bell	279.7
Pacific Bell	273.5
Chesapeake & Potomac of MD	269.1
Diamond State Telephone	202.7
Wisconsin Bell	197.9
Indiana Bell	172.2
Chesapeake & Potomac of VA	167.9
Michigan Bell	165.1
New England Telephone	152.9
Southern Bell	132.1
GTE Hawaiian	88.8
Southwestern Bell	64.8
Pacific Northwest Bell	59.6
South Central Bell	49.0
Chesapeake & Potomac of WV	45.2
Nevada Bell	37.0
Northwestern Bell	30.2
Mountain States Telephone	19.0

The results on a state by state basis of comparison are even more dramatic. Only 12 states have a higher telephone line density than Hawaii, while 37 states have a lower overall density. Even if one considers only the Bell companies' density

TABLE 6

TELEPHONE DENSITY BY STATE: FROM LOWEST TO HIGHEST\*

State Name	<u>Telephone Density</u>
1. Wyoming	2.5
2. Montana	2.7
3. South Dakota	4.3
4. North Dakota	5.0
5. New Mexico	5.6
6. Idaho	5.7
7. Nevada	6.2
8. Utah .	9.0
9. Nebraska	13.5
10. Oregon	15.1
ll. Kansas	15.3
12. Arizona	16.8
13. Colorado	18.3
14. Arkansas	19.0
15. Maine	21.2
16. Mississippi	21.5
17. Oklahoma	22.0
18. Iowa	24.2
19. Minnesota	28.7
20. Texas	31.8
21. West Virginia 22. Vermont	33.4
22. Vermont 23. Alabama	34.3 35.8
24. Missouri	36.8
25. Washington	38.8
26. Kentucky	40.2
27. Louisiana	42.9
28. Wisconsin	45.4
29. South Carolina	52.1
30. Georgia	57.5
31. Tennessee	58.3
32. North Carolina	68.1
33. New Hampshire	70.9
34. Indiana	77.9
35. Virginia	84.0
36. Michigan	85.2
37. Hawaii	88.8
38. Illinois	113.4
39. California	114.0
40. Ohio	130.6
41. Florida	139.8
42. Pennsylvania	147.2
43. Delaware	202.7
44. New York	222.5
45. Maryland	269.5
46. Connecticut	390.7
47. Rhode Island	446.6
48. Massachussetts	448.1
49. New Jersey	680.7

<sup>\*</sup>Figures for Alaska were not available so it is not included.

by state, 29 states still fall below the line density of Hawaii.

All 29, however, are protected by safeguards. The line

density by state is provided in Table 6 on the preceding page.

#### D. Business Headquarters

Another argument that GTE makes is the percentage of business headquarters located in its territories is lower than the average of the BOCs. In this respect the percentage of business lines coupled with the usage per line is more indicative of the potential for competitiveness. Further, concepts such as ONA were designed to aid competitive provision of enhanced services. Many competitive enhanced services providers are small businesses and serving small businesses is a goal of ONA. Table 7, on the following page, sets out the relative rank by state for percentage of lines that are business lines. Thirty-seven states have a lower business line to total line percentage than Hawaii. According to 1989 statistics by operating company, GTE Hawaiian has one of the highest number of calls per line in the nation.

#### E. Operational Independence

The operational level, however, is more relevant than the comparison of state by state since that is the level at which federal policy would be carried out and implemented. There is one last point to be made with respect to this level. The operating companies represent the operational level of many of the Regional Bell Holding Companies. This is not the case with GTE. The true operational level for GTE is represented by something they refer to as the "Operating Agreement," which is a document that sets out a loose association between the actual companies in the provision of services. There are four regional operating units

TABLE 7
States Ranked By Percentage of Business Lines: Lowest to Highest\*

	Percent of Business
State	To Total Lines
l Arkansas	23.5%
2. Mississippi	23.7
3. Kentucky	23.7
4. West Virginia	24.3
5. Iowa	24.5
6. Alabama	24.7
7. Missouri	25.0
8. Maine	25.1
9. Louisiana	25.4
10. South Dakota	25.4 25.4
ll. Rhode Island 12. Oklahoma	25.8
13. Tennessee	26.0
14. Idaho	26.2
15. North Dakota	26.5
16. Ohio	26.5
17. South Carolina	26.5
18. Montana	26.6
19. Vermont	27.0
20. Wisconsin	27.0
21. Kansas	27.4
22. Nebraska	27.6
23. Oregon	27.8
24. North Carolina	27.9
25. Florida	28.2
26. New Mexico	28.8
27. Utah	28.9
28. Washington	28.9
29. New Hampshire	29.0
30. Michigan	29.1
31. Texas	29.1
32. Arizona	29.5
33. Minnesota	29.7
34. Connecticut	30.5
35. Pennsylvania	30.9
36. Nevada	31.1
37. Indiana	31.3
38. Colorado	31.7
39. Hawaii	31.7 31.9
40. Massachusetts	32.0
41. Georgia	32.7
42. Virginia	33.1
43. Wyoming 44. Illinois	33.5
	33.7
45. New Jersey 46. New York	34.0
47. Maryland	34.3
48. Delaware	35.5
49. California	37.3
AS OFFICE HTE	3.13

\*Figures for Alaska were not available so it is not included.

under the current "Operating Agreement," which was signed by the various companies on April 10, 1991. These regional operational entities are referred to by GTE as GTE South, GTE North, GTE

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TABLE 8

COMPARISON OF ACTUAL OPERATIONAL LEVEL OF GTE AND BOC RANKED BY DENSITY

Operating Unit	No. of Lines	Square Miles	<u>Density</u>
NJ Bell	4,873,362	6,675	730.1
IL Bell	5,229,295	12,009	435.4
NY Tel	9,601,789	28,226	340.2
PA Bell	5,228,323	18,230	286.8
Ohio Bell	3,219,855	11,513	279.7
Pac Bell	13,986,907	51,142	273.5
C&P of MD	2,803,624	10,418	269.1
Diamond St.	416,970	2,057	202.7
WI Bell	1,672,323	8,449	197.9
IN Bell	1,787,021	10,377	172.2
C&P of VA	2,577,597	15,348	167.9
MI Bell	4,141,840	25,084	165.1
NET	5,612,704	36,718	152.9
Southern Bell	9,926,612	75,125	132.1
SW Bell	11,444,061	176,547	64.8
Pac. NW Bell	2,854,095	47,887	59.6
GTE West	5,254,437	92,173	57.0
GTE South	3,645,513	70,463	51.7
S. Central	7,078,607	$1\overline{44},\overline{372}$	49.0
C&P of WV	685,082	15,143	45.2
Nevada Bell	221,267	5,987	37.0
GTE North	3,801,449	114,396	33.2
NW Bell	3,596,827	$\overline{119,271}$	$\overline{3}\overline{0.2}$
Mt. Bell	5,855,614	308,158	19.0
GTE Central	2,315,858	171,761	13.5

Note: This arrangement includes the Contel companies recently acquired. It also assumes Contel CA is included in West which currently awaits CPUC approval.

Central and GTE West. Table 8 provides a comparison, which, as best can be ascertained at this point in time, is the most appropriate level of comparison between Bell and GTE using the operational level rather than the formal operating companies of GTE. The GTE operating units are set out in Appendix A.

#### III. THE CASE OF GTE

#### A. Court Commentary

Even before GTE's merger with Contel, the Courts took issue with the Commission's arguments regarding the company's size. GTE is now as large as the largest RBHC by any measure of company size. The Seventh Circuit notes that the Commission's argument that there are substantive differences between GTE and the RBOC's is not fully persuasive because GTE is not only a large company "but has a history much like AT&T's of trying to hinder foreign attachment." Further, the decision then goes on to note .."we are greatly puzzled by the Commission's repeated references to the independents ..as serving mainly rural areas, as if such areas were less deserving of protection from monopoly abuse than city dwellers." (Illinois Bell v. FCC, 740 F. 2d 485 (7th Cir. 1984))

In it's recent remand of Computer III the Ninth Circuit points out that it will discuss FCC treatment of GTE in detail in its analysis because the haphazard treatment of GTE illustrates the ad hoc nature of the Commission's reasoning over the course of rulemakings with respect to the relationship between data processing and basic telephone service. In it's decision, the Ninth Circuit calls attention to the lack of any consistent reasoning by the Commission for its discrimination between GTE and the RBOCs. (California v. FCC, 905 F.2d 1217,1237 (9th Cir. 1990)).

#### B. Line Density

The line density argument on which GTE relies assumes financial hardship is incurred because rural areas are more expensive to serve than urban areas. Comparing the line density with the net income per line for the GTE and BOC

companies shows no significant relationship between the line density and the companies' profitability. The weak relationship that does occur is a negative relationship. However, when the relationship is controlled for investment per line, it virtually disappears. In other words, as one might expect, revenue requirements are set to meet the investment levels. Further, GTE serves many urban subscribers.

GTE currently serves subscribers in 12 of the top 25 major metropolitan areas of the United States. GTE serves subscribers in 40 of the 50 states. Table 9 following shows the top 25 MSA's according to the 1990 Census by the U.S. Census Bureau. GTE not only serves many of these cities but has a major presence in five of them, including Los Angeles, which is now the largest city in the United States. In fact, Tampa-St. Petersburg, the 20th largest metropolitan area in the nation, is served only by GTE. Those cities GTE serves are starred. If it is a major presence it is marked by a double star.

In short, GTE service areas include the very largest metropolitan areas more than the BOC's do. It cannot claim that it's urban presence is minor. Even using the 1980 statistics that GTE did when filing replies, its presence in urban areas was not minor. But given the trends in population movement, in 1990 its presence in far more major. GTE's presence in the Northeastern U.S. has, until its acquisition of Contel, been non-existent. However, over the last 10 years, the U.S. population has shifted dramatically toward the "sunbelt". What U.S. Census statistics

<sup>2/</sup> Population of Metropolitan Areas: 1990 and 1980, By 1990 Population Rank. U.S. Bureau of the Census, Population Division, MA-1. See, e.g., Column 3, Pct. Change, 1980-90.

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TABLE 9

1990 CENSUS LIST OF THE TOP 25 PRIMARY METROPOLITAN AREAS IN THE U.S.: RANKED HIGHEST TO LOWEST

Metro	politan Area	1990 Population
** 1 2 3 4 * 5 6 * 7 8 * 9	Los Angeles/Long Beach New York City Chicago Philadelphia Detroit Washington, D.C. Houston Boston Atlanta Nassau/Suffolk	8,863,164 8,546,846 6,069,974 4,856,881 4,382,299 3,923,574 3,301,937 2,870,669 2,833,511 2,609,212
* 12 **13	Riverside/San Bernadino Dallas San Diego	2,588,793 2,553,362 2,498,016
* 15 **16	Minneapolis/St. Paul St. Louis Anaheim/Santa Ana Baltimore	2,464,124 2,444,099 2,410,556 2,382,172
18 19	Phoenix Oakland Tampa/St. Petersburg/Clearwater	2,362,172 2,122,101 2,082,914 2,067,959
21 * 22	Pittsburgh Seattle Miami/Hialeah	2,007,939 2,056,705 1,972,961 1,937,094
	Cleveland Newark	1,831,122 1,824,321

tell us is that this shift has been primarily to the south and southwest. This shift to the south and southwest makes GTE a far more major presence in urban markets than it was before. Table 10 shows GTE and RBOC current representation in the top 25 MSA's. In fact, unlike GTE in Tampa-St. Petersburg, Southwestern Bell does not serve any top 25 MSA exclusively. Three RBHC's (Pacific Telesis, U.S. West and Bell South) each serve one exclusively just like GTE. Currently, only Nynex, Ameritech and Bell Atlantic solely serve more top urban markets than GTE.

	TABLE 10	
Holding Company		Number of  Top 25 MSA's Served
GTE Bell Atlantic		$\frac{1}{5}\frac{2}{5}$
Pacific Telesis		5
Nynex		3
Ameritech		3
Southwestern Bell		3
U.S. West		3
Bell South		2

#### C. Financial Capacity

GTE argues that it will be a financial hardship to implement ONA. Yet, as Table 11 shows, GTE's revenues and income compare very favorably to the RBHC's.

TABLE 11

# COMPARISON OF REVENUES AND INCOME BY HOLDING COMPANY (DOLLAR AMOUNTS SHOWN IN THOUSANDS)

HOLDING COMPANY	TOTAL OPERATING REVENUES	NET OPERATING REVENUES	NET INCOME
Bell South  GTE (New Structure)  Nynex  Ameritech  Bell Atlantic  GTE (Old)  Southwestern Bell  U.S. West	\$11,995,874 10,840,906 11,086,660 9,353,340 10,209,411 9,549,706 7,408,690 8,128,848	\$3,392,988 3,002,364 2,682,516 2,679,067 2,641,825 2,582,536 2,088,815 2,030,564	\$1,617,916 1,423,173 947,416 1,185,466 1,205,611 1,219,671 993,724 923,480
Pacific Telesis	7,998,678	2,064,911	1,256,374

Note: See Appendix B for derivation of these amounts.

Further, GTE's net income per line over all its lines served compares favorably to that of the RBHC's. Table 12 sets out GTE's net income per line as compared with the RHBC's. Clearly, it will not impose any greater financial hardship on GTE than it has on the RBHC's. Only one RBHC, Bell South, has a higher net income per line at the holding company level.

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TABLE 12

COMPARISON OF GTE NET INCOME PER LINE WITH THAT OF THE RBHC'S

HOLDING COMPANY	NET INCOME/LINE	LINE DENSITY
Bell South	\$95.14	77.5
GTE*	94.77	33.7
Pacific Telesis	88.43	248.7
Southwestern Bell	86.83	64.8
U.S. West	75.04	25.9
Ameritech	73.86	238.0
Bell Atlantic	72.69	256.5
NYNEX	62.27	234.3

\* Does not include Contel. However for Contel companies for whom figures were available, the range in income per line was \$91.05 - \$233.48 which makes this figure appear to be a reasonable, if not conservative, estimate of the current net income per line.

Even if line density were a factor, some threshold level would need to be identified. GTE's line density certainly does not fall below any implicit threshold currently existing.

The most telling characteristic of the lack of any real difference between GTE and the individual RBHC's shows up dramatically when one compares GTE with U.S. West. U.S. West serves fewer lines, covers more square miles of territory has a lower net income and its total line density is 25.9 lines per square mile as opposed to GTE's 33.7. Further, even at the operating company level, all three of U.S. West's operating companies fall in the bottom half when all BOC's and GTOC's are ranked on line density. GTE, by contrast, has two operating companies in the top half.

While GTE argues that only 6% of businesses have headquarters in their territories, this historical situation is unlikely to continue. Further, intensity of use is probably a more important measure. Table 13 shows the average number of calls per line per year by company.

TABLE 13

# OPERATING COMPANIES RANKED BY AVERAGE NUMBER OF CALLS PER LINE PER YEAR

	Number of Calls
Operating Company	Placed Per Line/Yr
1. GTE Hawaiian Tel	4,605
2. South Central Bell	4,544
3. Southwestern Bell	4,399
4. Southern Bell	4,270
5. Ohio Bell	4,215
6. Northwestern Bell	4,180
7. Mountain States	4,163
8. Michigan Bell	4,068
9. C & P (DC)	4,005
lO. Illinois Bell	3,941
ll. C & P MD	3,918
l2. Pacific Northwest Bell	3,887
13. C & P Va	3,845
14. New England Telephone	3,791
15. Wisconsin Bell	3,704
l6. Indiana Bell	3,646
17. GTE California	3,576
18. C & P West Virginia	3,527
19. GTE North	$\frac{3}{3}, \frac{346}{344}$
20. Bell of Pennsylvania	3,344
21. Pacific Bell	3,235
22. New Jersey Bell	3,182
23. Diamond State Telephone	3,165
24. Nevada Bell	3,017
25. GTE South	2,867
26. Contel Virginia	$\frac{2,867}{2,817}$
27. GTE Southwest 28. Contel California	2,672
28. Contel California	2,654
29. GTE Florida	2,596
30. Contel New York	2,463
31. Contel Illinois	2,451
32. Contel Missouri	2,406
33. New York Telephone	2,350
34. Contel Texas	2,266
35. GTE Northwest	294
35. GTE Northwest	

Telecommunications facilities are a critical factor in information service businesses locational decisions. The availability of ONA allows them to configure their own services more efficiently. The existence of CPNI rules protects them from unfair competition from the generally much larger telephone carriers.

All types of companies, however, are increasingly moving their operations out of the major urban areas to more suburban areas. Concerns with urban crime, availability of good schools, and a generally higher quality of life are creating the impetus for such moves. This is the very territory that GTE claims it serves most.

#### TABLE 14

#### CITIES WHERE CEI PLANS FIRST DEPLOYED THROUGH MARCH 1990 BY CMSA/MSA 1990 CENSUS RANKING

	POPULATION
CMSA/MSA	RANK 1990
NEW YORK	1
LOS ANGELES	2
SAN FRANCISCO	
PHILADELPHIA	4 5 7
BOSTON	7
WASHINGTON, D.C.	8
DALLAS	9
HOUSTON	10
ATLANTA	12
SAN DIEGO	15
ST. LOUIS	17
PITTSBURGH	19
PHOENIX	20
DENVER	22
KANSAS CITY	25
SACRAMENTO	, 26
NEW ORLEANS	32
ORLANDO	37
MEMPHIS	41
WEST PALM BEACH	50
OMAHA	63
DES MOINES	94
DAVENPORT	104
BOISE	154
BURLINGTON	212

Not only will trends in business location and the growth of information/communication businesses increasingly look for high quality telecommunication but the steady growth of telecommuting requires that telecommunication facilities be available in suburban areas where workers live.